IN THE CLAIMS:

Please AMEND claims 1-2, 18, and 35, as shown below.

1. (Currently Amended) A method comprising:

first determining for different nodes of a circuit arrangement one or more predetermined operations to execute;

second determining one or more division criteria for dividing signals or signal components into signal classes;

dividing at least one of the signals or signal components according to the one or more division criteria into the signal classes; and

executing the predetermined operations in the circuit arrangement nodes according to the signal classes,

wherein the circuit arrangement is at least substantially in accordance with a combined tree structure comprising ~~, wherein~~ at least one first tree branch configured to perform ~~performs~~ transmitter tasks and at least one second tree branch configured to receive ~~performs~~ receiver tasks, and ~~in which~~ wherein the circuit arrangement comprises one or more nodes of different branches ~~is~~ connected in a predetermined manner.

2. (Currently Amended) A method comprising:

first determining for different circuit arrangement nodes at least one operation to execute and selecting a modification level from the circuit arrangement;

merging together nodes in the selected modification level and deleting irrelevant nodes and links between the nodes and/or adding ~~Previously Presented~~ new links;

second determining one or more division criteria for dividing the signals or signal components into signal classes;

dividing at least one of the signals or signal components according to the one or more division criteria into the signal classes; and

executing the determined operations in the circuit arrangement nodes according to the signal classes.

3. (Cancelled)

4. (Previously Presented) A method comprising:

first determining for different nodes of a circuit arrangement one or more predetermined operations to execute;

second determining one or more division criteria for dividing signals or signal components into signal classes;

dividing at least one of the signals or signal components according to the one or more division criteria into the signal classes; and

executing the predetermined operations in the circuit arrangement nodes according to the signal classes,

wherein the circuit arrangement is at least substantially in accordance with a centralized loop such that at least two subtrees are connected to the loop, wherein at least one subtree performs tasks of radio-frequency parts and at least one second subtree performs tasks of baseband parts.

5. (Previously Presented) The method of claim 1, wherein the signals or the signal components transfer packet-form data and the signal classes are indicated in a packet header.

6. (Previously Presented) The method of claim 1, wherein the nodes perform tasks of radio-frequency parts or baseband parts.

7. (Previously Presented) The method of claim 1, wherein the circuit arrangement is configured to transfer feedback information.

8. (Previously Presented) The method of claim 1, wherein said signals comprise signals to be modulated in different manners in one or more baseband nodes, wherein the modulated signals are divided into different signal classes.

9. (Previously Presented) The method of claim 1, wherein data can be transmitted from the nodes in unicast to one node or in multicast or broadcast to a plurality of nodes.

10. (Previously Presented) The method of claim 1, wherein network traffic load is monitored according to the signal classes.

11. (Previously Presented) The method of claim 1, wherein the signal classes constitute a hierarchic signal class system comprising one or more levels.

12. (Previously Presented) The method of claim 1, wherein inter-node links have a maximum capacity, wherein number and type of the transmitted signal classes can be altered.

13. (Previously Presented) The method of claim 1, wherein the signals are categorized into predetermined quality classes, and the quality classes of the signals are taken into account when the signal is clipped.

14. (Previously Presented) The method of claim 1, wherein the signals are divided into quality classes and signal power is measured in each of the quality classes.

15. (Previously Presented) The method of claim 1, wherein the signals having different requirements for modulation accuracy are divided into different signal classes.

16. (Previously Presented) The method of claim 1, wherein the signals are divided into different signal classes after at least one of spatial, temporal or frequency-level pre-processing.

17. (Previously Presented) The method of claim 1, wherein the signals are divided into different signal classes after interference cancellation pre-processing.

18. (Currently Amended) An apparatus comprising:

nodes arranged to perform at least one operation;

a divider configured to ~~to~~ divide one or more signals or signal components according to one or more predetermined division criteria into signal classes; and

performing circuitry configured to perform predetermined operations according to the signal classes,

wherein the apparatus is configured substantially in a combined tree structure comprising ~~, whereby~~ at least one first tree branch configured to perform ~~performs~~ transmitter tasks and at least one second tree branch configured to performs receiver tasks, and wherein the combined tree structure comprises one or more nodes of different branches ~~is are~~ connected in a predetermined manner.

19. (Cancelled)

20. (Previously Presented) An apparatus comprising:

nodes arranged to perform at least one operation;

a divider configured to divide one or more signals or signal components according to one or more predetermined division criteria into signal classes; and

performing circuitry configured to perform predetermined operations according to the signal classes,

wherein the apparatus is configured substantially in a centralized loop such that at least two subtrees are connected to the loop, wherein at least one first subtree performs tasks of radio-frequency parts and at least one second subtree performs tasks of baseband parts.

21. (Previously Presented) The apparatus of claim 18, wherein the signals or the signal components transfer packet-form data and the signal classes are indicated in the packet header.

22. (Previously Presented) The apparatus of claim 18, wherein the nodes perform tasks of radio-frequency parts or baseband parts.

23. (Previously Presented) The apparatus of claim 18 further comprising a transmitter configured to transfer feedback information.

24. (Previously Presented) The apparatus of claim 18, wherein the divider is further configured to divide the signals to be modulated in different manners into different signal classes.

25. (Previously Presented) The apparatus of claim 18, further comprising a transmitter configured to transmit data from the nodes to one node or a plurality of nodes.

26. (Previously Presented) The apparatus as claimed in claim 18, further comprising a monitor configured to monitor network traffic load according to the signal classes.

27. (Previously Presented) The apparatus of claim 18, wherein the signal classes constitute a hierarchic signal class system comprising one or more levels.

28. (Previously Presented) The apparatus of claim 18, wherein links between the nodes have a maximum transfer capacity, wherein a number and a type of the transferred signal classes can be altered.

29. (Previously Presented) The apparatus of claim 18, wherein the signals are divided into predetermined quality classes, and wherein the apparatus further comprise an accounting circuitry configured to take into account the quality classes when one of the signals is clipped.

30. (Previously Presented) The apparatus of claim 18, wherein the divider is further configured to divide the signals into predetermined quality classes and measuring signal power in each of the quality classes.

31. (Previously Presented) The apparatus of claim 18, further comprising a controller configured to control the division into signal classes.

32. (Previously Presented) The apparatus of claim 18, wherein the divider is further configured to divide signals having different requirements for modulation accuracy into different signal classes.

33. (Previously Presented) The apparatus of claim 18, wherein the divider is further configured to divide the signals into different signal classes after at least one of spatial, temporal or frequency-level pre-processing.

34. (Previously Presented) The apparatus of claim 18, wherein the divider is further configured to divide the signals into different signal classes after interference cancellation pre-processing.

35. (Currently Amended) A computer program embodied on a computer readable medium, the computer readable medium storing code comprising computer executable instructions comprising:

first determining for different nodes of a circuit arrangement one or more predetermined operations to execute;

second determining one or more division criteria for dividing signals or signal components into signal classes;

dividing at least one of the signals or signal components according to the one or more division criteria for the signal classes; and

executing the predetermined operations in the circuit arrangement nodes according to the signal classes,

wherein the circuit arrangement is at least substantially in accordance with either (a) a combined tree structure comprising ~~, wherein~~ at least one tree branch configured to perform ~~performs~~ transmitter tasks and at least one second tree branch configured to perform ~~performs~~ receiver tasks, and ~~in which~~ wherein the circuit arrangement comprises one or more nodes of different branches ~~is~~ connected in a predetermined manner; or (b) a centralized loop such that at least two subtrees are connected to the loop, wherein at least

one subtree performs tasks of radio-frequency parts and at least one second subtree performs tasks of baseband parts.

36-37 (Cancelled)

38. (Previously Presented) The method of claim 4, wherein the signals or the signal components transfer packet-form data and the signal classes are indicated in a packet header.

39. (Previously Presented) The method of claim 4, wherein the nodes perform tasks of radio-frequency parts or baseband parts.

40. (Previously Presented) The method of claim 4, wherein the circuit arrangement is configured to transfer feedback information.

41. (Previously Presented) The method of claim 4, wherein said signals comprise signals to be modulated in different manners in one or more baseband nodes, wherein the modulated signals are divided into different signal classes.

42. (Previously Presented) The method of claim 4, wherein data can be transmitted from the nodes in unicast to one node or in multicast or broadcast to a plurality of nodes.

43. (Previously Presented) The method of claim 4, wherein network traffic load is monitored according to the signal classes.

44. (Previously Presented) The method of claim 4, wherein the signal classes constitute a hierarchic signal class system comprising one or more levels.

45. (Previously Presented) The method of claim 4, wherein inter-node links have a maximum capacity, wherein number and type of the transmitted signal classes can be altered.

46. (Previously Presented) The method of claim 4, wherein the signals are categorized into predetermined quality classes, and the quality classes of the signals are taken into account when the signal is clipped.

47. (Previously Presented) The method of claim 4, wherein the signals are divided into quality classes and signal power is measured in each of the quality classes.

48. (Previously Presented) The method of claim 4, wherein the signals having different requirements for modulation accuracy are divided into different signal classes.

49. (Previously Presented) The method of claim 4, wherein the signals are divided into different signal classes after at least one of spatial, temporal or frequency-level pre-processing.

50. (Previously Presented) The method of claim 4, wherein the signals are divided into different signal classes after interference cancellation pre-processing.

51. (Previously Presented) The apparatus of claim 20, wherein the signals or the signal components transfer packet-form data and the signal classes are indicated in the packet header.

52. (Previously Presented) The apparatus of claim 20, wherein the nodes perform tasks of radio-frequency parts or baseband parts.

53. (Previously Presented) The apparatus of claim 20 further comprising a transmitter configured to transfer feedback information.

54. (Previously Presented) The apparatus of claim 20, wherein the divider is further configured to divide the signals to be modulated in different manners into different signal classes.

55. (Previously Presented) The apparatus of claim 20, further comprising a transmitter configured to transmit data from the nodes to one node or a plurality of nodes.

56. (Previously Presented) The apparatus as claimed in claim 20, further comprising a monitor configured to monitor network traffic load according to the signal classes.

57. (Previously Presented) The apparatus of claim 20, wherein the signal classes constitute a hierarchic signal class system comprising one or more levels.

58. (Previously Presented) The apparatus of claim 20, wherein links between the nodes have a maximum transfer capacity, wherein a number and a type of the transferred signal classes can be altered.

59. (Previously Presented) The apparatus of claim 20, wherein the signals are categorized into predetermined quality classes, and wherein the apparatus further comprises an accounting circuitry configured to take into account the quality classes when one of the signals is clipped.

60. (Previously Presented) The apparatus of claim 20, further comprising a measurer configured to measure signal power, wherein the signals are divided into quality classes and the signal power is measured in each of the quality classes.

61. (Previously Presented) The apparatus of claim 20, further comprising a controller configured to control the division into signal classes.

62. (Previously Presented) The apparatus of claim 20, wherein the divider is further configured to divide signals having different requirements for modulation accuracy into different signal classes.

63. (Previously Presented) The apparatus of claim 20, wherein the divider is further configured to divide the signals into different signal classes after at least one of spatial, temporal or frequency-level pre-processing.

64. (Previously Presented) The apparatus of claim 20, wherein the divider is further configured to divide the signals into different signal classes after interference cancellation pre-processing.